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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,753	01/29/2004	Taro Hosozawa	892_029	5704
25191	7590	11/15/2006	EXAMINER	
BURR & BROWN			SOOHOO, TONY GLEN	
PO BOX 7068			ART UNIT	
SYRACUSE, NY 13261-7068			PAPER NUMBER	

1723

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/767,753

Applicant(s)

HOSOZAWA, TARO

Examiner

Tony G. Soohoo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on telephone interview of 10-19-2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 7-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Upon applicant's request in the telephone interview of 10-1-2006 for a withdrawal of the Office Action made final mailed 10-03-2006, a reconsideration of the finality has been made by the examiner. The Office Action mailed 10-03-2006 has been rescinded and a *new office action* is now made below.

1. Claims 1-6 and 11 are under consideration. Claims 7-10 are withdrawn to a non-elected invention. See paper mailed 04/10/2006.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-6 and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim(s) contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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Claim 1 recites that the "plurality of hole, each having the same size as one another" (see also the amended claims filed 1/31/2006, for the original insertion). There is no original basis for such a description that each hole size are the same as one another.

Also claim 10 fails to provide original basis for "each of the plurality of holes formed in the partition member [having] a polygonal outer peripheral shape."

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Flint et al 5516209 (Flint '209).

Flint '209 shows a flexible sheet have a 1st mixing passage 28, and a 2nd mixing passage 28, and mixing elements formed at the interface at 40 inside the chambers 28 forming holes which provides a dividing and combing of the flow a material from mixing.

It is noted that the holes appear to have spacing between the elements 40 which appear to be the same size separating the flow into multiple times for mixing.

Nonetheless, it is deemed that it would have been obvious to one of ordinary skill in the art to change the *number and size* of the holes and intermediate partition to any equal

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or relative size or order, without undue experimentation in order to optimize and affect the amount of working of the material as it flows across the mixer.

With regards to the recitation of "where the passage are formed by", the statement directed to the method of making the device and does not structurally distinguish the finally formed product. Thereby it is denied any structural distinction.

With regards to the recitation of the use of welds to form the product, such feature is also directed to a method of construction, such a recitation to the manner of producing a join via a weld has been fully considered and granted no patentable distinction to the claimed structure defined by the final apparatus product.

With regards to the recitation of "so as that the materials to be mixed are divided [a number of] times and merged together". The recitation is directed to the operation of the device and does not positively limit the scope of the number of holes or partitions, thus has not been afforded any structural distinction.

With regards to claim 11, the holes each have a sides, thereby may be deemed as polygonal in the peripheral shape. Nonetheless, absent any unexpected results, the peripheral shape of the hole may be changed in any shape in order to optimized the mixing caused by the flow streams in the mixer. It has been held that, absent any unexpected result, a mere change in form or shape on the basis of suitability is a matter of obvious mechanical design choice. In re Dailey, 149 USPQ 47 (CCPA 1976).

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6. Claims 1-6 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Flint 6135632 (Flint '632).

Flint '632 shows a flexible sheet, have a 1st mixing passage located on one side 1st sheet 20 formed between the intermediate partition 22, 55, 44, and a 2nd mixing passage 28 located between the 2nd sheet 24 and intermediate portion 22, 55, 44, and further mixing elements holes 80, 85, 90 formed at the interface at 40 inside the chambers 28 forming holes which provides a dividing and combing of the flow a material from mixing.

It is noted that the some holes appear to have a depth and diameter which appear to be the same size which provides multiple flows for mixing. Nonetheless, it is deemed that it would have been obvious to one of ordinary skill in the art to change the *number and size* of the holes and intermediate partition to any equal or relative size or order, without undue experimentation in order to optimize and affect the amount of working of the material as it flows across the mixer.

With regards to the recitation of "where the passage are formed by", the statement directed to the method of making the device and does not structurally distinguish the finally formed product. Thereby it is denied any structural distinction. With regards to the recitation of the use of welds to form the product, such feature is also directed to a method of construction, such a recitation to the manner of producing a join via a weld has been fully considered and granted no patentable distinction to the claimed structure defined by the final apparatus product.

With regards to the recitation of "so as that the materials to be mixed are divided [a number of] times and merged together". The recitation is directed to the operation of the device and does not positively limit the scope of the number of holes or partitions, thus has not been afforded any structural distinction.

With regards to claim 11, the holes 80, 85, 90 adjacent 100 upon the intermediate portion 22 each have a periphery which appears to be arcuate. Nonetheless, absent any unexpected results, the peripheral shape of the hole may be changed in any shape in order to optimized the mixing caused by the flow streams in the mixer. It has been held that, absent any unexpected result, a mere change in form or shape on the basis of suitability is a matter of obvious mechanical design choice. In re Dailey, 149 USPQ 47 (CCPA 1976).

Response to Arguments

7. Applicant's arguments filed 8-16-2006 have been fully considered but they are not persuasive. Applicant has amended the claims. Applicant's remarks to the references has been addressed in the body of the rejections made above.

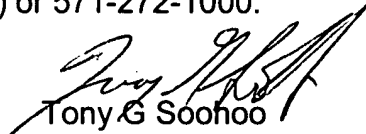
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G. Soohoo whose telephone number is (571) 272 1147. The examiner can normally be reached on 8AM-5PM, Tue-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Tony G Soohoo
Primary Examiner
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